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INTELLIGENCE BRIEF

COMMUNIST COUNTRIES SPECIALIZE IN THE PRODUCTION
OF RADIO RECEIVER TUBES

DIRECTORATE OF INTELLIGENCE

Office of Research and Reports

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COMMUNIST COUNTRIES SPECIALIZE IN THE PRODUCTION
OF RADIO RECEIVER TUBES

The highly successful program of the Eastern European Communist countries for specialization in the production of radio receiver tubes is an exception to the general reluctance of these countries to engage among themselves in effective international specialization in production. During the period 1962-64, specialization in the production of certain tubes, possibly at the suggestion of the USSR, resulted in extraordinary growth in the trade in these items among Czechoslovakia, East Germany, Poland, and Hungary -- the primary producers of electronics equipment in Eastern Europe. During the same period a sharp increase occurred in East German and Czechoslovak exports of these tubes to the USSR. This program for the specialization of production of radio receiver tubes not only brought the benefits of "economies of scale" to the producing countries but also expanded the supply of these tubes available to the USSR at a time when the latter apparently was embarking on a program that gave high priority to the expansion of the production of military electronics gear.

1. Background

The development of international specialization in the production of radio receiver tubes among the Eastern European Communist countries grew out of a bilateral agreement between Poland and Czechoslovakia in 1961 that provided for the exchange of about 1.3 million tubes of the types commonly used in radios and television receivers. East Germany at its own request was made a party to the agreement in 1962 and, on the basis of a tripartite production plan, agreed to reduce the variety of tubes in its production schedules to those which it produced relatively efficiently. In 1962 the combined exports of radio receiver tubes by these three countries to one another amounted to about 13 million tubes; in 1963, combined exports totaled about 16 million tubes. In 1964, with minor Hungarian participation in the specialization program, a total of about 22 million tubes were exchanged. It is estimated that in 1965 these four countries will exchange 25 million tubes (see Table 1). Rumania and Bulgaria, not being significant producers of radio tubes, do not participate in the specialization program.

2. Benefits of the Program

In 1962, Polish and Czechoslovak production of radio receiver tubes increased by about one-third, and East German production entered a period of steady expansion (see Table 2) after having fluctuated widely

for several years. In addition, the number of types of tubes produced by each of the participating countries was reduced. In Poland, for example, there was a reduction of about one-third in the variety of tubes produced.

The USSR is a prime beneficiary of this program, since it generated substantial supplies of tubes of entertainment and industrial grade for the Soviet consumer at a time when the Soviet electronics industry was vigorously expanding its output of military electronics. During 1962-65, the USSR is expected to import -- chiefly from Czechoslovakia and East Germany -- more than 50 million radio receiver tubes, compared with imports of 10 million to 12 million from all Communist countries during 1958-61.

3. Role of CEMA

25X1 The role played by CEMA in these developments is not entirely clear. The specialization program apparently evolved out of the common interests of the participating countries and was implemented in the first place through bilateral negotiations. In discussing the proposed exchange with Czechoslovakia in 1961, an official Polish source deprecated the usefulness of CEMA in negotiations of this sort, but after 1961 the Poles attributed the success of the exchanges to the activities of CEMA. In addition, available evidence indicates that the entrance of East Germany into the specialization agreement was facilitated by the use of CEMA channels of communication. [redacted] the exchanges are based on bilateral agreements among the participants, [redacted]

25X1 [redacted] calls the radio receiver tube program an example of "intrabranch" specialization resulting from "multilateral agreements with CEMA countries." CEMA personnel and channels of communication probably were used by the participating countries to expedite the negotiation of bilateral agreements and to insure that these agreements harmonized with multilateral requirements. Furthermore, because Soviet interests were so well served, it seems likely that encouragement from Moscow was exerted in the background and possibly through CEMA offices.

Table 1

Estimated Exports of Radio Receiver Tubes
by the Eastern European Communist Countries
1962-65

	Million Units			
	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
East Germany	<u>5.1</u>	<u>12.5</u>	<u>15.4</u>	<u>17.5</u>
To countries in the special- ization program <u>a/</u>	3.6	4.3	6.9	8.5
To the USSR	0.5	7.2	7.5	8.0
To other Communist countries and the Free World	1.0	1.0	1.0	1.0
Czechoslovakia	<u>9.1</u>	<u>11.1</u>	<u>13.8</u>	<u>17.5</u>
To countries in the special- ization program <u>a/</u>	5.0	5.6	6.3	7.0
To the USSR	3.1	4.5	6.5	9.5
To other Communist countries and the Free World	1.0	1.0	1.0	1.0
Poland	<u>4.0</u>	<u>6.0</u>	<u>7.6</u>	<u>8.3</u>
To countries in the special- ization program <u>a/</u>	4.0	6.0	7.6	8.3
Hungary	<u>7.0</u>	<u>7.0</u>	<u>7.0</u>	<u>7.0</u>
To countries in the special- ization program <u>a/</u>	0	0	0.9	1.2
To the USSR	1.1	1.1	1.2	1.2
To other Communist countries and the Free World	5.9	5.9	4.9	4.6

a. East Germany, Czechoslovakia, and Poland during 1962-65; and Hungary during 1964-65.

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Table 2

Estimated Production of Radio Receiver Tubes
in Selected Eastern European Communist Countries
1961-65 a/

	Million Units				
	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
East Germany	19.0	21.0	23.0	25.0	27.0
Czechoslovakia	11.3	14.8	15.5	N.A.	N.A.
Poland	9.4	12.8	15.0	18.6	19.3
Hungary	12.8	13.2	14.2	15.1	16.2

a. Including small amounts of special-purpose tubes, transmitting tubes, and cathode ray tubes.

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13 July 1965

MEMORANDUM FOR: Chief, Dissemination Control Branch, DD/CR
FROM : Chief, Publications Staff, ORR
SUBJECT : Transmittal of Material

It is requested that the attached copies of CIA/RR CB 65-38,
Communist Countries Specialize in the Production of Radio Receiver
Tubes, July 1965, [redacted] be forwarded as follows:

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State, INR Communications Center,
Room 6527, State Dept. Bldg.
Suggested distribution for
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Acting

Attachments:

Copies #189 - #197 of CB 65-38

cc: CGS/RB

ACTION COMPLETED

The dissemination requested by
this memorandum has been completed.

BY: *NOB*
Date: *13 July 65*

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